

# Maximum Likelihood Estimation of Latent Affine Processes

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This article develops a direct filtration-based maximum likelihood methodology for estimating the parameters and realizations of latent affine processes. Filtration is conducted in the transform space of characteristic functions, using a version of Bayes' rule for recursively updating the joint characteristic function of latent variables and the data conditional upon past data. An application to daily stock market returns over 1953-96 reveals substantial divergences from EMM-based estimates; in particular, more substantial and time-varying jump risk. The implications for pricing stock index options are examined.